

# EUROPEAN COMMUNITIES

## Information > R + D

SERIES: RESEARCH AND DEVELOPMENT

3/76

### PRACTICAL COOPERATION IN SCIENCE AND TECHNOLOGY - COST

Since the end of 1970, the world of Community scientific and technical research has become familiar with the name of COST, an acronym for "European Cooperation in the field of Scientific and Technical Research". COST is concerned with cooperation in science and technology between the Member States of the Community and the following non-member European countries:

Austria  
Finland  
Greece  
Norway  
Portugal  
Spain  
Sweden  
Switzerland  
Turkey  
Yugoslavia

Thus cooperation within COST reaches far beyond the bounds of the European Community, and has become the springboard for a far-flung network of European research. The Community itself takes an active part in the COST projects, and lends its aid in implementing them by undertaking the work of coordination and providing secretarial services.

The COST Committee, consisting of Senior Officials responsible for scientific and technical research in the nineteen associated countries, holds its meetings at the headquarters of the Council of Ministers of the European Communities in Brussels.

X/604/76-E

How did the COST formula come into being, and what is the net result so far of this attempt at collaboration in the field of science and technology?

### The history of COST

In the mid-sixties, the Community of Six, as it was at that time, was particularly worried by the fact that, compared with the giant strides being made by the Americans and Japanese, the pace of technological development was flagging to such an extent, that, in the long run, Europe was likely to find itself dependent on the industries of those two competitors. The countries of the European Community were therefore compelled to decide on a policy of technological cooperation, and the more rational use of resources and personnel that this would bring. In 1964, the Council of Ministers set up the Medium-Term Economic Policy Committee under a Chairman elected from the national delegations and with secretarial services provided by the Commission. This Committee issued recommendations both to the Commission and the Council of Ministers.

The following year, a subcommittee was formed under the name of PREST (Politique de Recherche Scientifique et Technologique), its members being Government experts on science and technology from the six Community countries. Under its first Chairman, André Maréchal, PREST pinpointed seven problem areas:

- Data processing
- Telecommunications
- New means of transport
- Oceanography
- Metallurgy
- Environmental protection
- Meteorology

and appointed working parties to draw up proposals for research projects

In April, 1969, the Frenchman, Pierre Aigrain, then Chairman of the PREST Committee, submitted the second report, named after himself, in which 47 individual projects were proposed for the seven research sectors.

In implementing these projects, the Community of Six sought from the outset to bring in the four candidates for accession - the United Kingdom, Ireland, Denmark and Norway - as well as other interested European countries outside

Subscription free of charge by written request to:

**COMMISSION OF THE EUROPEAN COMMUNITIES**  
Directorate-General Information  
Rue de la Loi 200 - B-1049 Brussels

the Community. In mid-1969, the Council of Ministers of the Six forwarded the Aigrain Report to nine other European countries, and invited their cooperation.

In October 1970, the Governments set up the COST Committee, composed of senior officials from the participating countries and the Commission of the European Communities. The secretarial services for this Committee are provided by the Secretariat-General of the Council of Ministers.

Within a few months of its foundation, COST was joined by Finland and Yugoslavia, and by the end of 1971 - after the entry of Greece and Turkey - the membership had risen to nineteen countries.

Seven working parties of experts from these countries now set to work to sift the 47 projects originally proposed by the Community, reduced them to 31 and finally worked out details for seven. These were incorporated in seven separate international agreements, each of which involved a different group of countries. Another feature of these agreements was that each partner country paid its own proportionate share of the costs of the project.

At a time when there was no Community research and development policy in existence, this form of "à la carte" cooperation had the advantage that, by avoiding decisions binding on all, it could be implemented relatively quickly: this applied in particular to sectors in which no provision had been made in the Community Treaties for research projects.

#### Projects adopted so far

The nineteen international agreements mentioned above were signed in November 1971 at a meeting of the nineteen Ministers responsible for research. They relate to shared research projects (concerted action projects) in the following areas:

##### 1. Establishment of a European Informatics Network

The aim of this data network is to link up various European computer centres with a view to exploring the possibilities of information exchange between one computer system and another.

Countries participating: France, Italy, Yugoslavia, the Netherlands, Norway, Portugal, BR Germany, Switzerland, Sweden, the United Kingdom and the European Atomic Energy Community.

The agreement entered into force on 1 February 1973.

2. Aerials with small first side-lobes and maximum G/T yield

This research is intended to improve the directional effect of aerials for satellite transmission.

Countries participating: France, Italy, Yugoslavia, the Netherlands, Switzerland.

The agreement entered into force on 1 June 1973.

3. Materials for gas turbines

Studies on the properties and behaviour of materials used in gas turbine .

Countries participating: Germany, Belgium, France, Italy, Luxembourg, the Netherlands, Austria, Switzerland, Sweden, the United Kingdom.

The agreement entered into force on 1 July 1972.

4. Materials for desalination plants

The materials undergoing examination are for use in plants for the desalination of sea-water by distillation. Countries participating: Belgium, Germany, Spain, France, Italy, Yugoslavia, Luxembourg, the Netherlands, Austria, the United Kingdom.

The agreement entered into force on 1 November 1972.

5. Research into the physico-chemical behaviour of SO<sub>2</sub> in the atmosphere

The research is intended to throw light on the reactions to which SO<sub>2</sub> is subject in the atmosphere.

Countries participating: Denmark, Germany, Spain, France, Greece, Italy, the Netherlands, Yugoslavia, Austria, the United Kingdom.

The agreement entered into force on 1 November 1972.

6. Analysis of organic micro-pollutants in water

The aim of this project is to develop a multiple analyzer to identify organic pollutants in air and water, and determine their concentration.

Countries participating: Denmark, Germany, Spain, France, Ireland, Italy, the Netherlands, Yugoslavia, Norway, Portugal, Switzerland, the United Kingdom and Northern Ireland.

The agreement entered into force on 1 November 1972.

7. Sewage sludge processing

The objective is to discover, by comparative experiments, the most expedient methods of eliminating or processing sewage sludge in industrial plants.

Countries participating: Denmark, Germany, the United Kingdom, Italy, France, the Netherlands, Yugoslavia, Norway, Switzerland, Finland, Sweden, Turkey, Belgium.

This agreement came into force on 1 August 1972.

On 16 June 1972, a further agreement was signed:

Aerial network with phase control

This research seeks to improve phase-controlled aerals with a view to achieving better transmission facilities with satellites.

Countries participating: Germany, France, the Netherlands, Finland and Sweden.

In the meantime, other projects have been launched in the areas of telecommunications meteorology and new means of transport, and still more are being prepared in the sectors of agricultural research and food technology. Up to now, only one of these new projects has come to fruition, namely the establishment of a European Centre for Medium-Range Weather Forecasts. Signed in 1973 by fifteen countries, the agreement has meanwhile entered into force and led to the foundation of an international organization. Based at Reading in the United Kingdom, and equipped with a

jointly financed budget, a set of staff regulations, a Supervisory Board and a Danish Director, the new Centre has got off to a good start.

Now a quick glance back at the reasons that led up to the COST cooperation :

- the European Community's efforts to fill the "technological gap";
- the wish for closer cooperation with the would-be member countries before their actual accession;
- the need to extend the Community's research activities to areas for which there was no legal basis in the Treaties;
- the idea of making the concerted action project a new means of international cooperation.

In retrospect, it is fair to say that the cooperation within COST has done much to achieve all four of these objectives. The seven projects have been completed to the satisfaction of all concerned.

Some of them aroused such keen interest that they were extended for a further period, and even broadened in their scope. The European Information Network in particular attracted much interest on the part of the national postal and telecommunications authorities owing to its far-reaching implications for industry, and several new countries subsequently subscribed to the agreement. The cooperation between the European Community and the United Kingdom, Denmark and Ireland smoothed the way for those countries in the R & D sector when they became fully fledged members of the Community in 1973. The experience gained in the definition and implementation of concerted action projects has been put to good use in developing the Community's research policy, and these projects are regarded today as a well-tryed method of carrying out Community research programmes.

On 14 January 1974, the Council of Ministers decided to work out a common policy in the field of science and technology that would embrace a wider field than that of nuclear science.

This meant that the situation with regard to COST had to be thought out afresh. Acting on a proposal from the Commission, the Council confirmed

in September 1974 that the main purpose of the COST framework should be to further cooperation between the Community and the non-member countries participating in COST.

What does this mean in practice? Essentially, it means that the COST activities will henceforward be geared to Community programmes. International agreements on individual projects between varying groups of countries will be fewer, and the Community as an entity will cooperate with the non-member countries on the basis of association agreements.

Should it transpire that there is no Community interest in a proposal put forward by non-member countries, it would be open to the interested countries to deal with that topic among themselves.

The reader will have realized by this stage that the COST cooperation was a creation of the Community of Six, and that the enlarged Community of Nine is now making ready to take over the role of leadership. Apart from the advantages that accrue to the Community, it is an arrangement that meets the wishes of countries which, for one reason or another, cannot belong to the Community (or not at the present time), but which are nevertheless anxious to maintain a close association with it.

In a forthcoming issue of this paper, an account will be given of the measures adopted by the Community to implement its policy in the field of research and development.